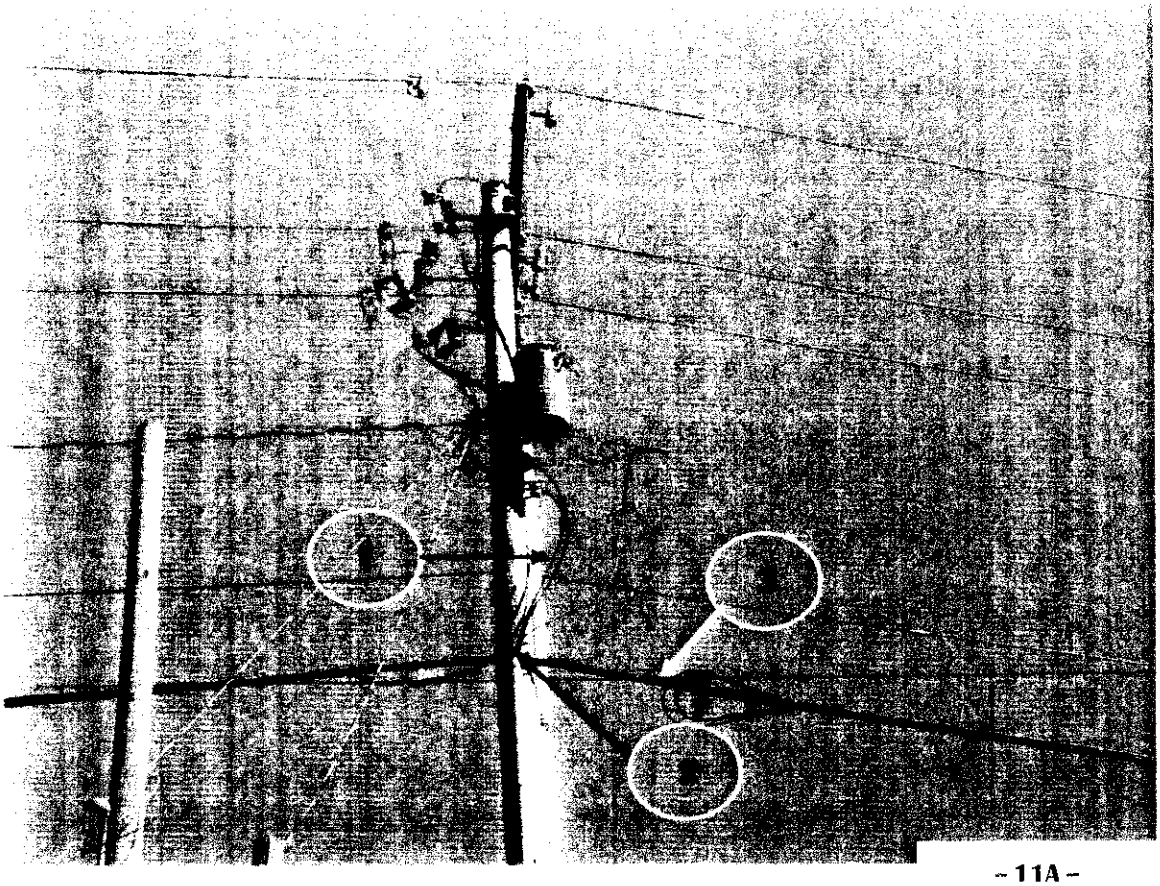
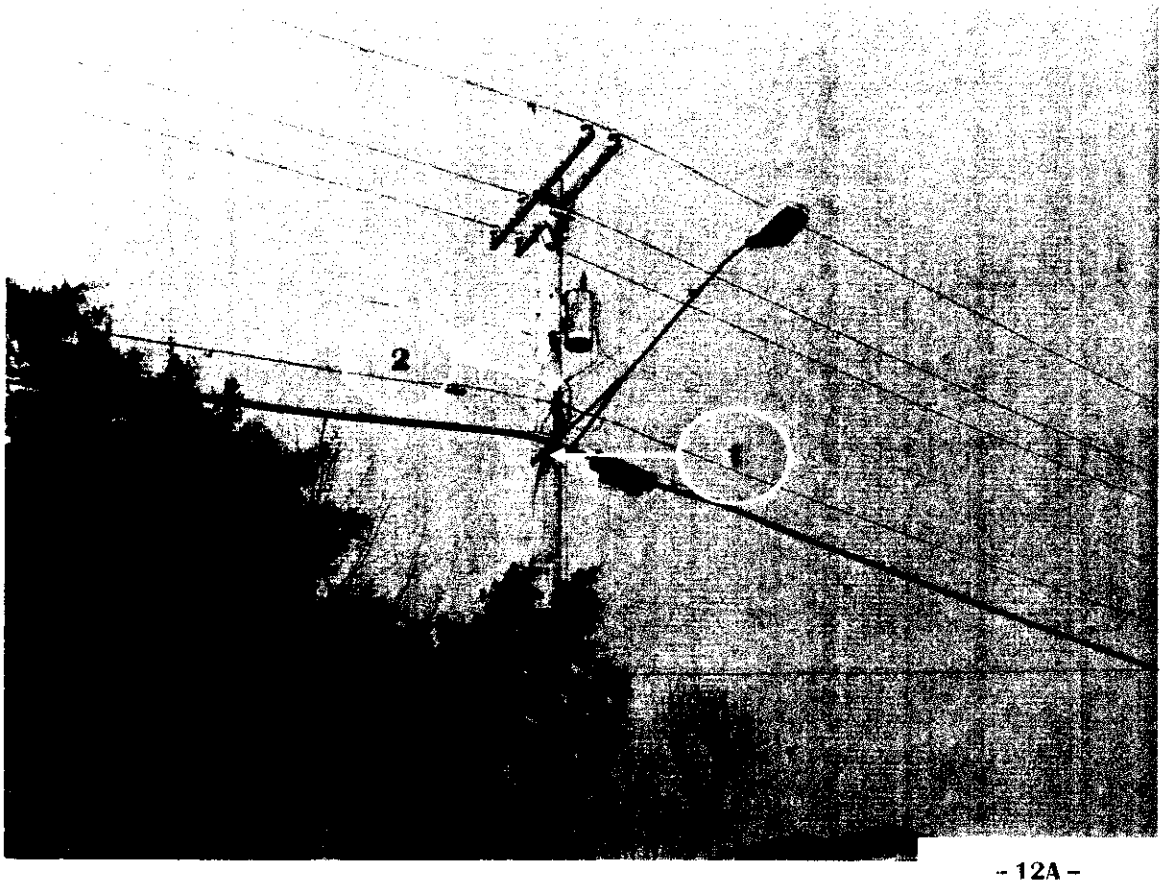
agreement or other relationship that would require telephone to move its facilities at the request of a cable operator—and they frequently decline to do so without such arrangement. In this case, telephone has not cooperated with either company in many cases.

22. Perhaps an even larger problem is that EAI – for whatever reasons – is not quick about relocating its facilities so that the indicated cable corrections can occur. It may be that the power company is reluctant to accept responsibility for its violations, that its crews are too busy or that they simply do not place a priority on completing this make-ready work. Whatever the case, the result is that EAI has been a major factor for what EAI attempts to blame cable as the unacceptably slow pace of correction. The two photos immediately below provide a vivid example of this.



– 11A –

In this photo, which I took, EAI placed an underground service up the pole outside cable (Arrow #1). As a result, the cable operator cannot move or work on this cable without the assistance of power company crews. The Comcast cable is pinned to the pole by electric wires (Arrow #2) which, by code, should be 40" above the cable television line (the bottom black line with the fiber "snow shoe" (Arrow #3)). It is obvious from the position of these facilities that cable was installed first. Despite pleas from Comcast, EAI still has not corrected this clear hazard. Location: Little Rock University Ave.



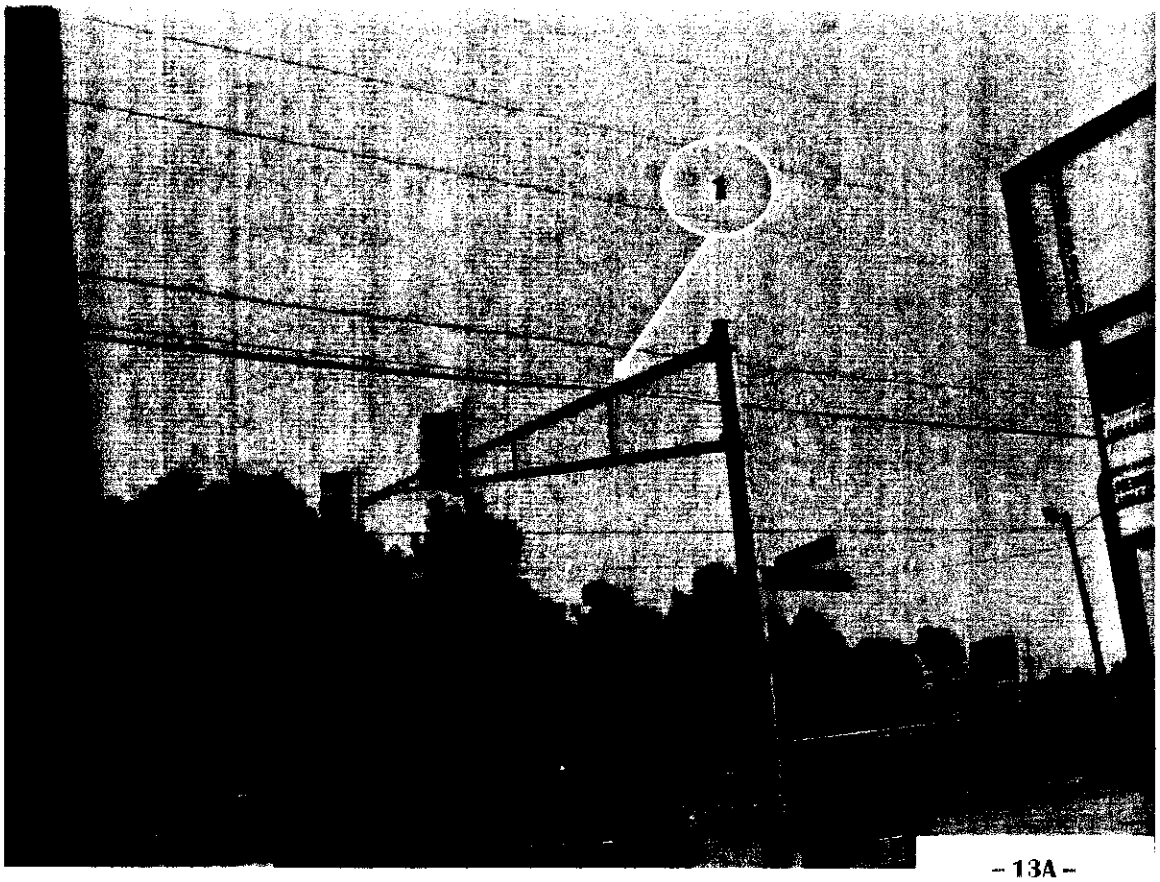
– 12A –

This photo, which I took, shows and EAI street-light bracket installed both below the telephone facilities (Arrow #1) and above the cable television facilities (Arrow #2). It is very obvious that this street light bracket could not have been installed before the cable television and telephone attachments because the street light brackets are installed *on top* of the communications facilities. This is one of what I would estimate to be many thousands of examples in Arkansas that contradict EAI's central assertion that electric facilities always came before cable. Location: Jacksonville, AR. N. First St.

23. Enlisting the cooperation of all parties on the pole is one of the most important issues in this dispute. My concerns with the way in which Entergy and USS designed and executed this inspection should not in any way be interpreted that I am opposed to safety inspections. If done correctly and fairly, they can be valuable to all attaching parties. Much of my work is [illegible] such. [illegible] I do for power companies. The next three [illegible] had procedures for notice and cooperation in

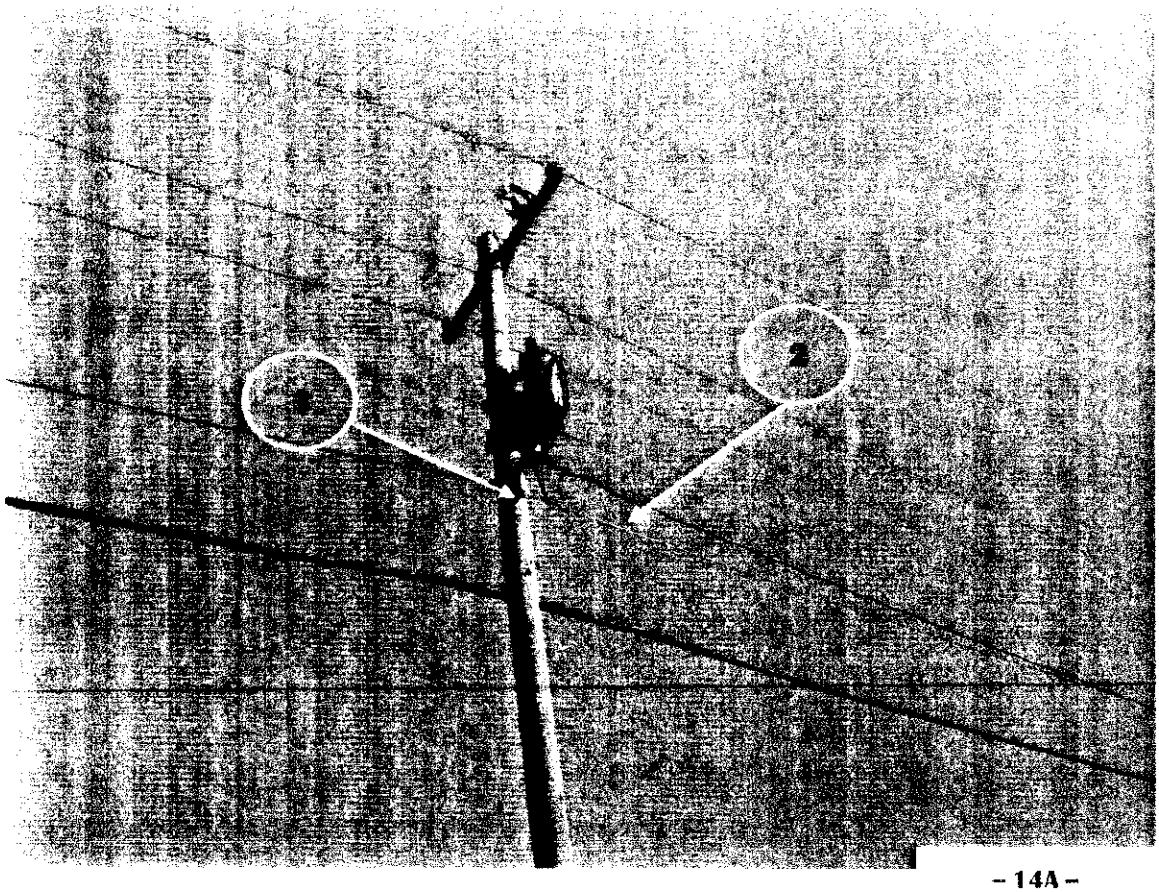
[illegible] merely blaming cable operators for serious situations

[illegible] and others create, could be avoided



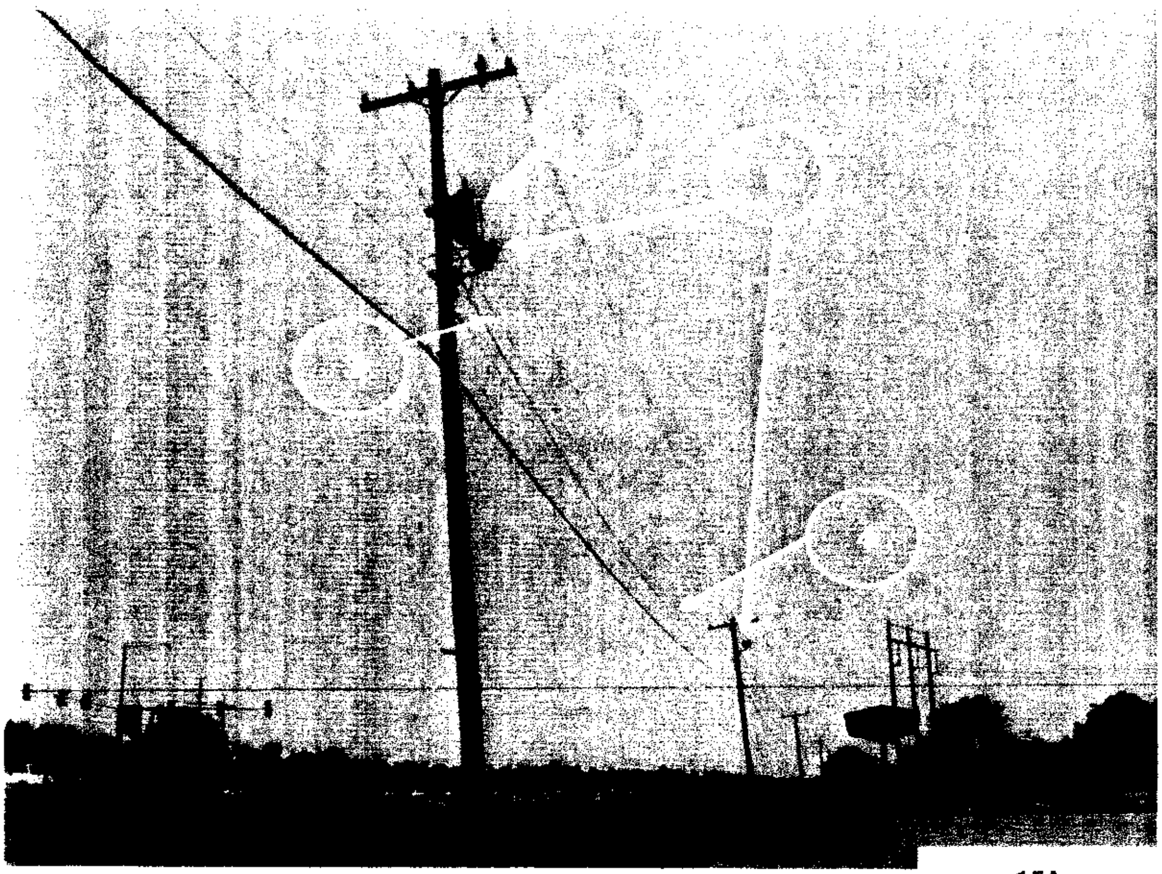
– 13A –

This photo, which I took, shows a common problem throughout Little Rock where new traffic signals are installed on long horizontal arms over the roadway by governmental agencies. In so doing they push the cable and/or telephone facilities up often creating violations with cable tv, telephone and electric lines (Arrow #1). These types of problems need cooperation and good communications directed and facilitated by the power company. Location: Little Rock Geyer Springs Rd. at Forbing Rd.



– 14A –

In this photo, which I took, EAI has installed a new flood light bracket (Arrow #1) below a fiber-optic cable (Arrow #2) now owned by a competitive telecommunications company as well as triplex secondary to the light on the next pole installed by EAI in violation. As is pointed out elsewhere Entergy installed this fiber optic cable (Arrow #2) in clear violation of the NESC at a time in which it was a part owner of the fiber venture that used to own this fiber strung throughout Little Rock (often in violation). Location – Little Rock University Ave.



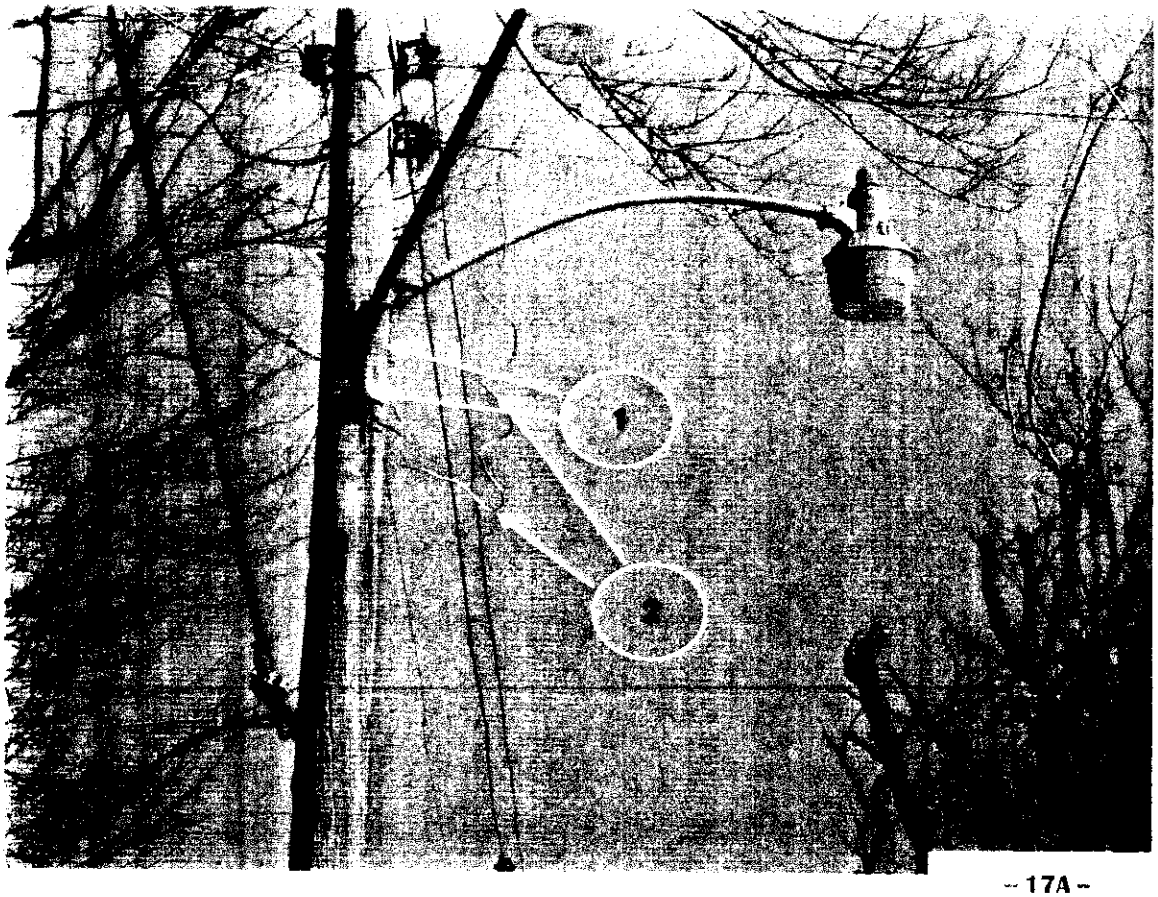
– 15A –

In this photo, which I took, the new flood lights on both of the poles shown (Arrows 1) are the only things served by the transformer (Arrow #2). This indicates that all these facilities were placed long *after* cable was in place. (I address this issue in greater detail when considering ACTA's False premise Number 3) EAI's triplex wire (Arrow #3) from the transformer pole hangs ***below*** the fiber-optic (Arrow #4) in the span in violation. It should be 30" ***above*** this fiber-optic cable. A fiber optic cable may be installed in the electric supply space (if non-conducting) or in the communication space but not in between, which is the communications worker safety zone. These fiber-optic facilities used to be part-owned by Entergy. Location: Little Rock University Ave.

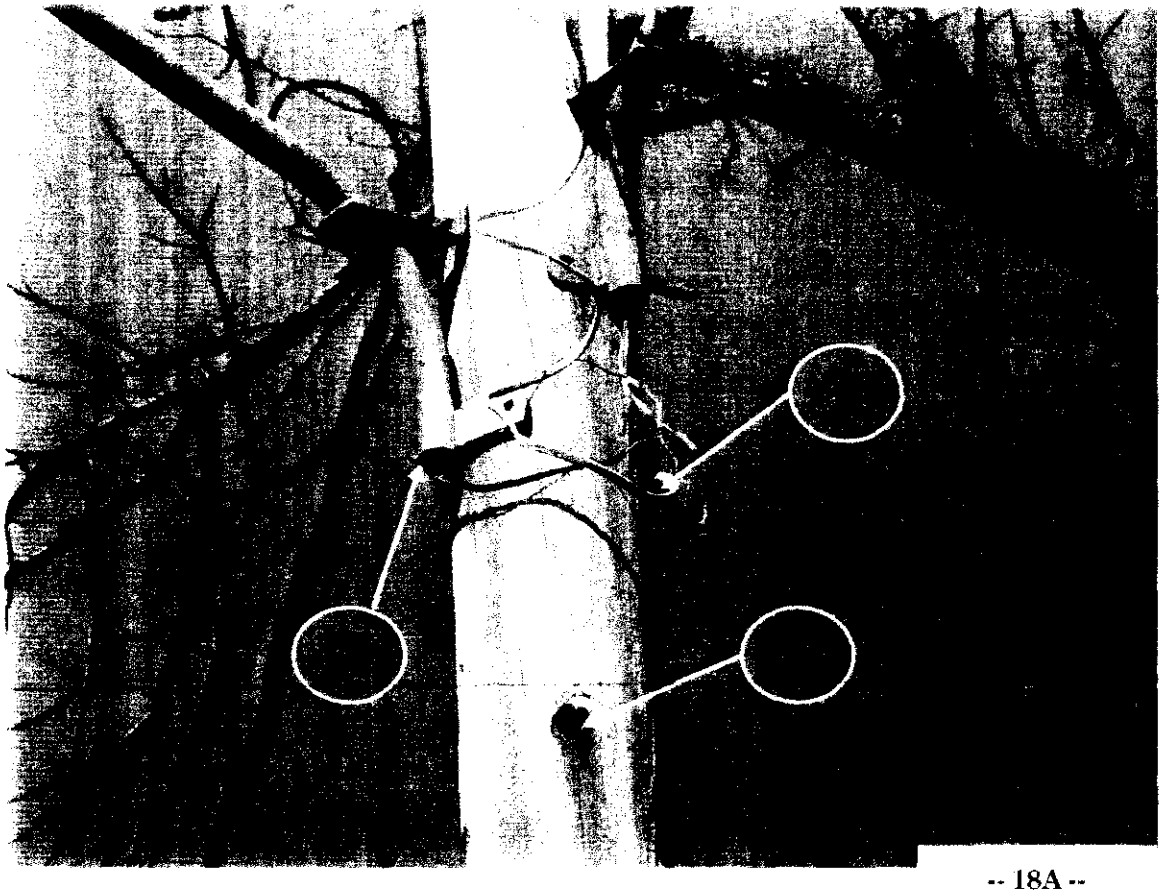
24 As I indicated, designing and implementing safety programs that include plant inspections and training of personnel working on and around electric lines accounts for a major part of my professional time. Doing this properly requires not simply that a survey or audit be designed well, that the people are well trained and the inspection is conducted thoroughly with [illegible] the [illegible], but also that there is buy-in from

all involved ***before*** the inspection is undertaken. This buy-in is most readily facilitated with plenty of advance notice to the other parties (phone, cable, cities, transportation departments, etc.), and their active – even proactive – participation in the process.

25. Because I have worked for large and small power companies, I understand that sometimes it can be difficult to enlist the cooperation of all parties in a safety inspection. On the other hand, I believe that even in those difficult circumstances it is a mistake and unreasonable for a pole owner to approach pole tenants in a punitive fashion, as I believe Entergy has done here. It is much more productive to approach these problems in a cooperative fashion because the pole owner often creates more problems than do attaching parties, as these next two pictures illustrate.



This photo, which I took, shows two street lights. The brackets are not grounded (Arrow #1). This violates EAI construction standards which are shown in the diagrams attached to some of its agreements. Even though EAI and USS purport to be concerned about plant safety, USS did not check for this EAI violation. Twenty inches of separation is required for un-grounded street light brackets. In addition, the "romex" type wire to power the lights hangs down beside the pole in violation (Arrow #2). Location: Little Rock 10th St rear of 928 Townsend St.



-- 18A --

This photo, which I took of the same two lights, shows the old bolt location (Arrow #1) where Comcast cable attachment previously was located less than 12" below the light leads (Arrow #2) and less than 20" below brackets not grounded (Arrow #3). Comcast visited this pole to resolve a guying problem which USS had notified Comcast to correct. USS had notified EAI to raise light leads to 12" above cable but nothing else. While correcting the guying, Comcast lowered its cable to obtain NESC compliance from the ungrounded brackets and low light leads which EAI had not yet raised. These violations still exist and must be corrected. Location: Little Rock 10th St. near of 928 Townsend St.

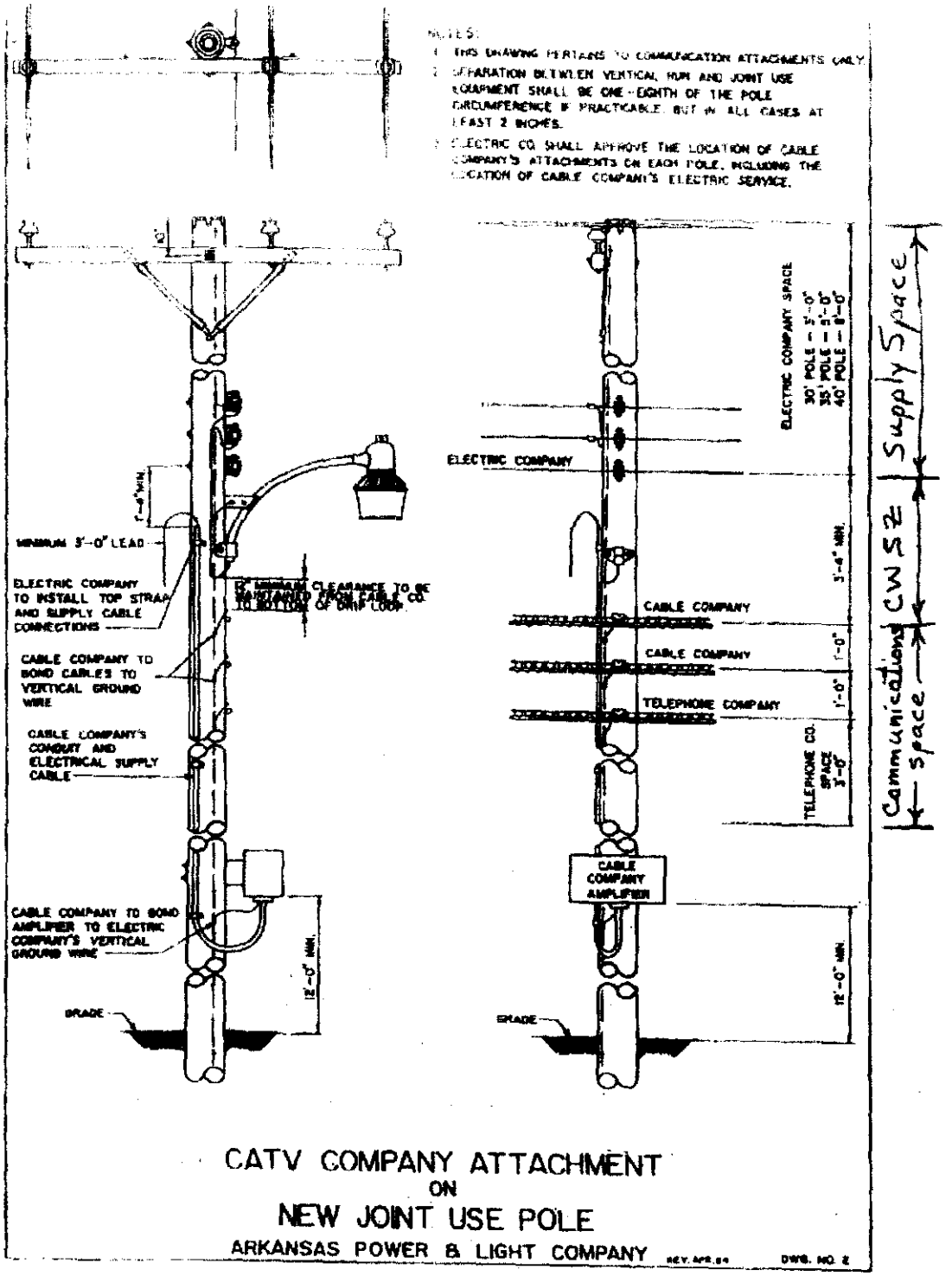
False Premise No. 3: All of Power's Facilities Were Installed Before Cable's, So Cable Is Responsible For Almost All Spacing Violations On Entergy's Poles.

26 Several EAI witnesses state that because cable operators historically have been the third attacher on poles (after the electric and telephone companies put in their facilities) those cable operators must have caused [illegible] violations on the poles. This is not correct. EAI

continues to install its facilities long after cable's attachments have been placed. To make matters worse it continues to this day to place its plant in violation, often creating gravely dangerous situations.

27. I have personally witnessed cable television lines installed over a 40-year period in every decade beginning in the 1960s. Aerial plant—electric and communications—is built today in much the same way that it was built in the 1960s.

28. The first things to be built are the poles and the electric lines that are located in the top portions of the pole. Historically, telephone companies installed their facilities in the "communications space" which begins below the "communications worker safety zone" ("CWSZ"). Cable television attachments usually were the third set of attachments to be placed on the pole, typically above telephone, and in most places – except where competitive fiber-based carriers are present – the last set of communications attachments before the CWSZ and (electric) supply place. The following diagram illustrates the different zones of a "typical" utility pole.

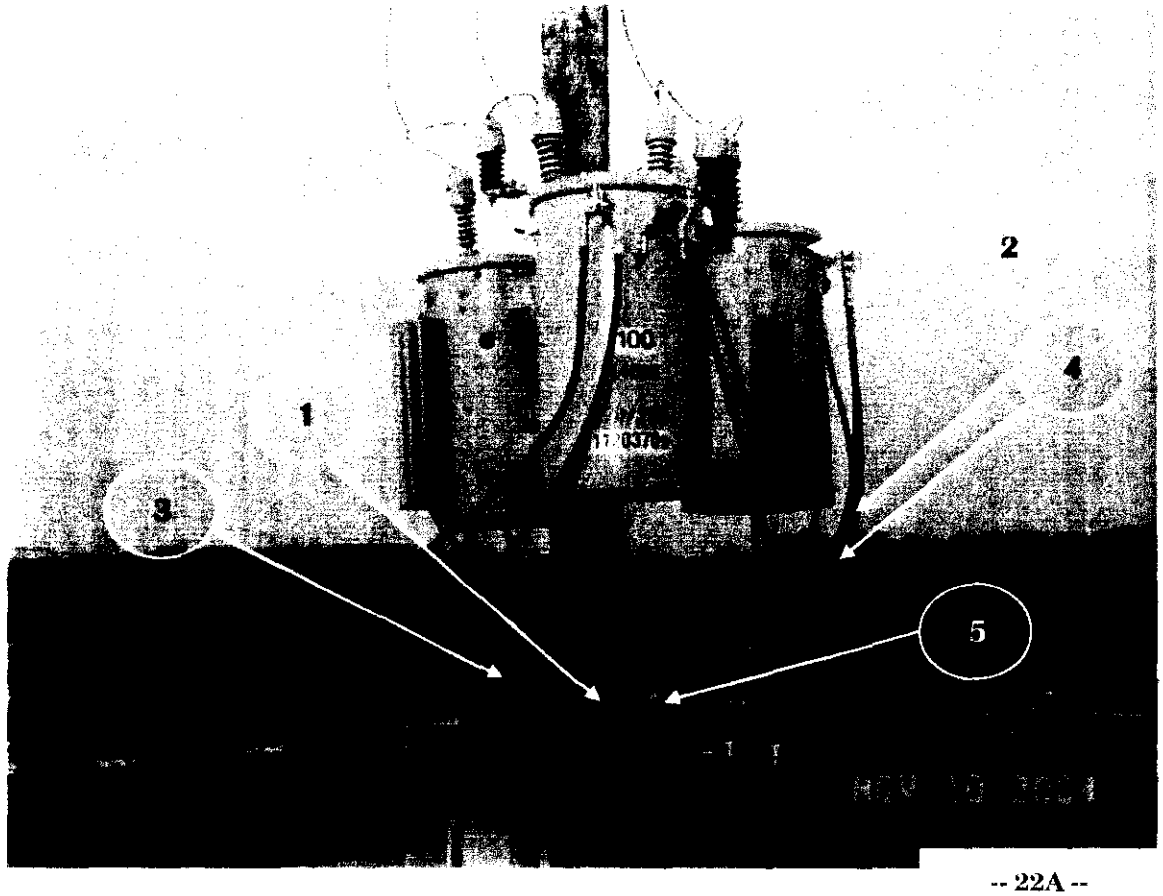


This diagram which is attached to at least some EAI pole agreements shows a standard EAI pole space allocation. This allocation includes five feet of communications space, a 40-inch communications worker safety zone ("CWSZ") and eight feet of electric supply space for a 40-foot pole. (The hand-written notes in the right margin are mine.)

The [illegible] space in the diagram at the right is what is referred to as the communications worker safety zone. ("CWSZ").

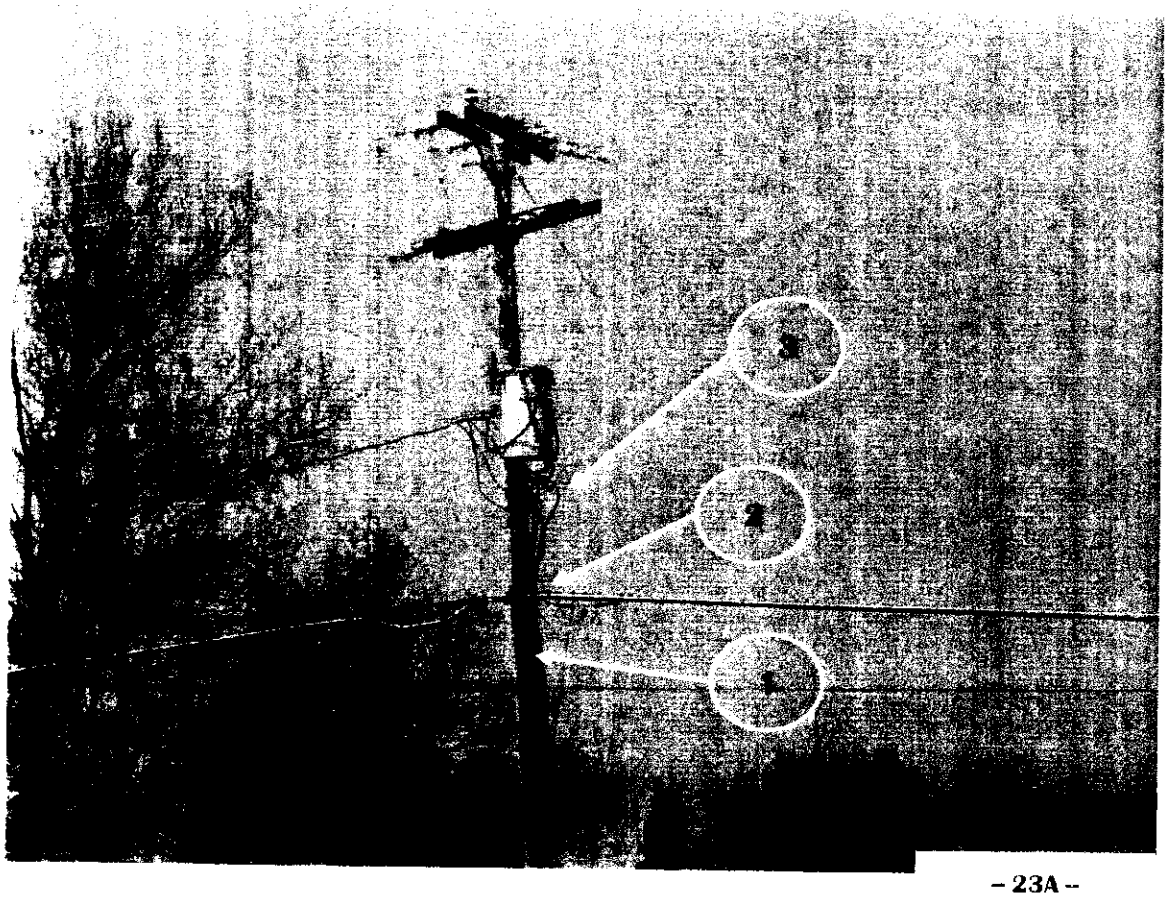
29. EAI's argument is that this sequence of attachments (electric, telephone and then cable) essentially proves that cable as the "last man on" *must* have created the violations. This argument overlooks one critical fact, the omission of which creates an absolutely false picture of plant conditions.

30. That fact is that power companies usually install transformers and secondary voltage wires only at the time that they are needed to supply power to a dwelling or other structure. The poles will be there, and high voltage electric lines will be there, but the transformers and secondary voltage lines to homes and businesses are only installed if electric service is needed. If electric service is not needed at a location, there is no transformer. Many of the violations that EAI assigns to Cable Operations were not created by cable at all. They were created by the electric company when it installed transformers and electric service drops (aerial or underground) in some cases ***decades*** after it set the poles and the cable operator had placed its facilities. This is not an isolated occurrence. Some good examples appear in the photographs that follow.



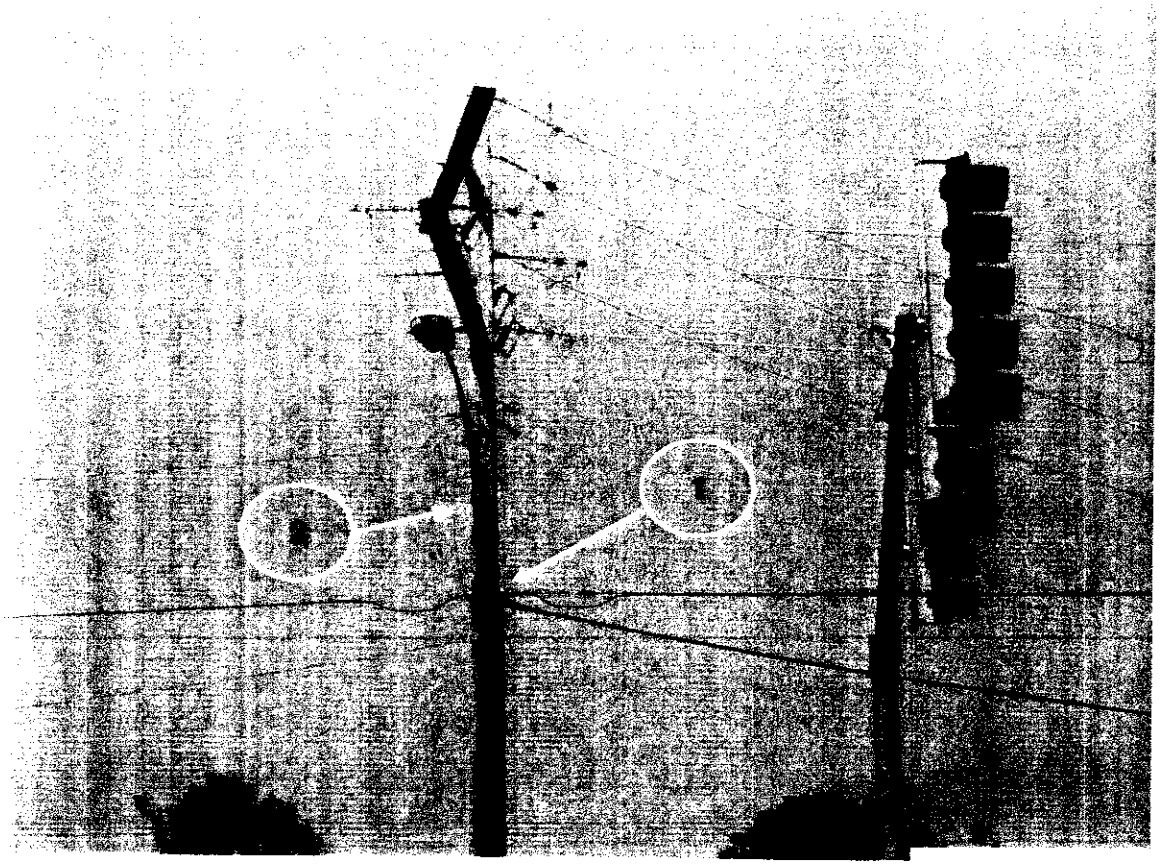
-- 22A --

One of Entergy's central contentions is that electric facilities always are on the poles first and that cable facilities always come later. This is so it can argue that whenever there are clearance violations, they have been created by cable. This photo shows that this is not true. The three-phase transformer bank depicted in this photo were installed within the last several months to provide electric service to a new McDonalds restaurant. The poles and the cable television attachments (Arrow #1) were installed before the offending riser conduits and transformers. Cox was attached in compliance. The new transformer cans (Arrow #2) the grey "riser" conduit (Arrow #3) and the electric wires (Arrow #4), were installed after cable. There are no more than a few inches of separation between the hot electric wires coming out of the riser (Arrow #3) and Cox's facilities (Arrow #1). The NESC mandates that there should be 40 inches between the riser cable and the Cox attachment. I believe that this pole was set by EAI to provide adequate vertical clearance above the new driveway at the McDonalds. These photos were taken at the direction of Jeff Gould of Cox.



– 23A –

This photo, which I took, presents another good example. It shows an EAI secondary underground service riser pipe (Arrow #1) stopping more than 12 inches ***below*** the cable television facilities (Arrow #2) located on this pole. The NESC requires this electric conduit to be 40 inches above cable. You can see that there are two underground service drops running from the transformer and the loops coming out of the transformer are very sloppy (Arrow #3). Putting the proper length of conduit and placing the loops correctly could have been done easily. Underground service risers such as these are usually added long after the cable television facilities have been installed. Other examples of poorly installed electric facilities that went in long after cable appear in the next photo. Location: Jacksonville, AR Alley between N. Bailey Blvd & N. James St.



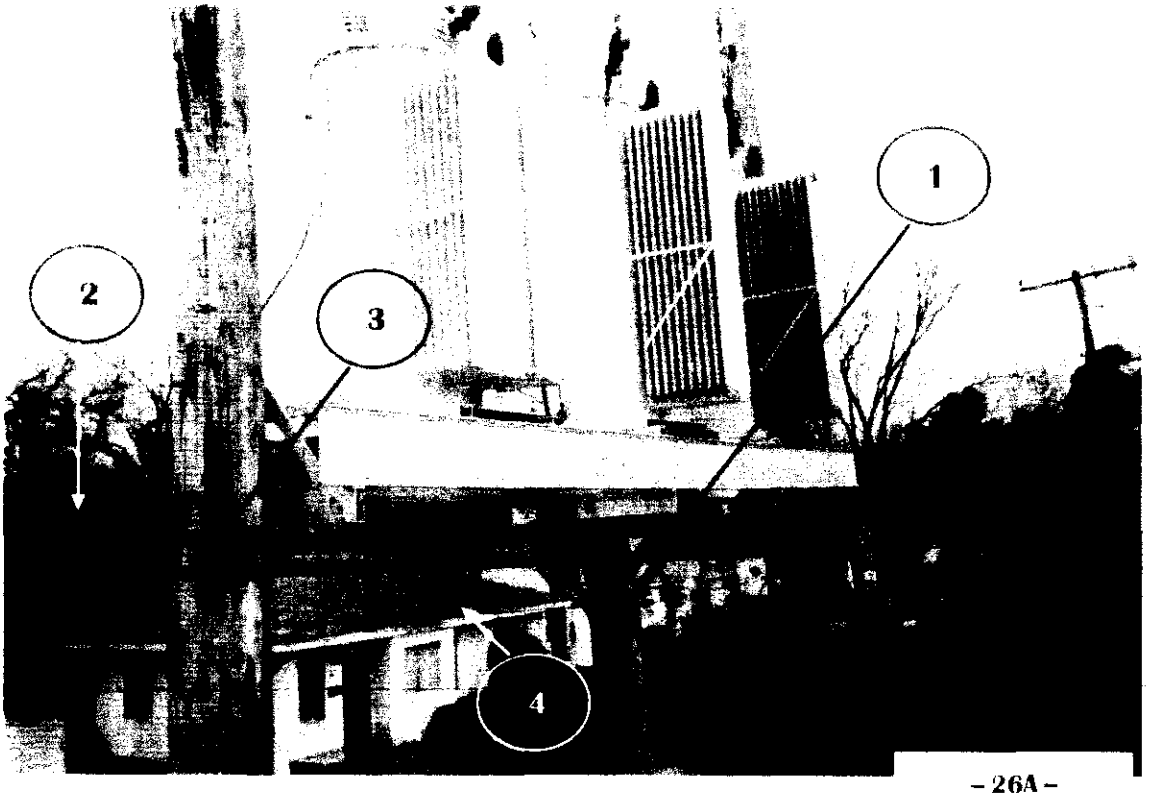
– 24A –

This photo, which I took, shows an EAI service to a new traffic signal. Electric power to supply the traffic signal is wired by the governmental agency or contractor. Metal conduit with two wires for 120 volt power is extended up this pole (Arrow #1). In this case, EAI should not have made this connection because of this NESC violation, and required the conduit owner to extend the conduit to 40 inches above cable television. You can see several exposed wires hanging beside the pole next to EAI's secondary on the left of the pole (Arrow #2). This is a blatant violation of the NESC's 40 inch rule. Connections to a new service (in this case traffic) must be 40 inches above cable. EAI should remedy this by placing a "u-guard" (which is essentially one-half a plastic conduit over the traffic signal leads, or require the owner of the traffic signal to extend the weather head up to 40 inches or more above cable. Location: Jacksonville, AR W Main St at N. Bailey Blvd.

31 In growing areas, traffic signals, street lights and new homes and businesses require new electric installations. In sparsely populated areas, however, transformers are placed relatively infrequently. Many of EAI's [illegible] 30 to 40 years or more ago along roads

with little initial development. Thousands of examples of these clean poles can still be seen, especially in outlying areas. They contain almost no pole space violations because neither power, telephone, nor CATV have added any drops or other facilities to those poles.

32. But again, as areas develop and homes and business replace open fields and unpopulated areas, the need for electricity increases and more transformers, services drops and other electric facilities are installed. In many of the Arkansas cases I have observed, the power company installs their facilities improperly and creates violations by installing them too close to cable and telephone. Frequently, EAI replaces a pole or adds another pole between two existing poles and does not leave space for cable television or telephone to transfer or attach in compliance. Again, the installation of these electric facilities are a major source of NESC violations, which sometimes create very serious safety issues. The next photograph provides a vivid example of this.



– 26A –

This photo, taken at the direction Jeff Gould of Cox Communications, shows a multi-pole platform-mounted voltage regulator that Entergy has installed *after* the installation of communications facilities. Note on the center pole the steel bracket (Arrow #1) that has completely boxed in the two sets of communications lines on the poles. The top line is the cable attachment (Arrow #2). EAI set new poles, pulled Cox's cable down and physically forced it beneath a bolt through one pole (Arrow #3). EAI built its neutral wire below the telephone cable (Arrow #4). Neither cable tv nor telephone is attached to either pole or bonded to the pole grounds. This creates a very dangerous situation. In installing these facilities Entergy has violated NESC rules, cable tv, telephone and EAI standards. This photo shows that EAI has a lack of understanding of the NESC, lack of training, no inspection of new construction and a complete disregard for users of the communications space. Electric companies, like communications companies from time to time must add new facilities to their networks. But they must do so in a way that respects the rights of others to occupy the poles, including providing adequate notice of the work that they wish to perform on the poles.

False Premise No. 4: Every Entergy Pole Attachment Standard Is Reasonable And Must Be Complied With.

55. As was outlined in the Complaint and the declarations of ACTA representatives, EAI and its contractor USS are imposing a number of

engineering and construction standards on Arkansas cable operators that simply are not reasonable.

34. Complainants have acknowledged that certain low cables, certain missing guy wires and certain close separations between power and cable TV create reliability risks and/or hazards to utility workers or the public. These are the kinds of items that should be corrected and—contrary to Entergy's assertions—cable operators are working today to do this.

35. To assist in this effort, Comcast has requested from EAI a list that prioritizes the violations that should be addressed first. EAI has refused to provide this list. After first stating in a negotiation (the May 26, 2004 meeting that I discuss in detail below) that it would provide such a list, EAI later told Comcast that Comcast already had a list of all violations found and that it was Comcast's obligation to sort through the list manually to determine priorities. This is just one of innumerable examples that exemplify Entergy's "it's your problem not ours" approach.

36. Moreover, EAI refuses to accept NESC compliance with certain rules as a solution to existing or future compliance, even in limited circumstances, while adopting NESC basic provisions in many others. Its refusal to accept reasonable interpretations and applications of the NESC has been a very significant impediment to resolving this matter informally. I can provide a very significant example of this.

EAI Will Not Agree To Reasonable Standards

37. After well over a year of impasse between Entergy on the one hand, and Alliance and Comcast on the other, in approximately February 2004, Comcast requested a meeting with senior people at EAI in an effort to resolve this dispute.

38. As I understand it, Comcast made a personal appeal to EAI's President and CEO Hugh MacDonald. This meeting, which I attended, eventually was held on May 26, 2004 and to me seemed promising because it established a real dialogue among all the parties: EAI, the cable people and USS. In fact, one of the outcomes of that meeting was that a "committee" was established to finalize engineering and construction terms that the parties would use to make the necessary plant corrections going forward. The main outcome of that meeting is that the parties had a good start on setting a foundation on reasonable engineering standards. They also established a tentative plan of action.

39. After much delay by EAI, the first committee meeting was held 35 days later on June 30, 2004. The "minutes" of the May 26, 2004 meeting were presented to the committee by EAI. The following paragraph in bold print had been inserted as the first item in the "minutes."

> **Any exceptions to contractual requirements agreed to at this meeting, or future committee meetings will only apply to pre-existing conditions that meet all NESC requirements. All new installations and attachments must meet all conditions and requirements of the contract.**

40. I participated in both the May 26, 2004 and the June 30, 2004 meetings. Nothing was mentioned in the May 26 meeting about the restrictions contained in this insert. Since the first sentence is confusing, we asked Entergy several questions at the June 30 meeting. EAI defined "pre-existing conditions" as only poles that had been reported by USS to have a violation. EAI further explained that all existing poles (or conditions) not identified by USS as violation poles, all poles presently included but modified in any way in the future and all new pole attachments would be subject to the different EAI standards.

41. We objected to the addition of these added restrictions as unreasonable and impossible to keep up with as field conditions change. It was absurd. EAI stated that the clause was non-negotiable. Getting nowhere on this point, the meeting finally moved on to attempt to resolve and clarify the few remaining issues that had not been clearly agreed to at the May 26 meeting.

42. Significant progress was made on the NESC rules and interpretations which EAI and USS would accept for clearing "past" violations. These included accepting 12-inch separations in spans between communications and neutral and 30-inch separation at poles. Other NESC rules regarding guying, marking guys, power supply rules and street lights were discussed and tentative agreements reached.

43. Another absolutely essential point on which Entergy refused to budge was that it would not agree to begin to provide advance notice to Comcast as required by the contract, before building down on existing poles into violation. This Reply Declaration is filled with examples of where just a little bit of communication between EAI and its communications attachers would prevent inefficient use of pole space, subsequent costly corrections and, most important, unsafe plant conditions.

44. EAI also insisted that USS must only approve plant conditions meeting the almost agreed-upon NESC rules that differed from EAI contract on a pole-by-pole basis. This, of course, would required much more time and expense to cable operators. In sum, the spirit of cooperation that marked the first May 26 meeting was entirely absent from the June 30 meeting. Nonetheless, the next committee meeting was scheduled and held on July 7, 2004.

45. Little progress was made at that or subsequent committee meetings. EAI added language that sought to require Comcast to secure a professional engineer certification on a pole-by-pole basis that the facilities comply with NESC rules because they comply with NESC editions in effect when built. In addition, EAI refused to consider its absurd requirement limiting negotiated engineering guidelines to past-identified violations. Despite the fact that no final agreement was reached, Comcast notified EAI that it was proceeding to correct violations without a complete agreement but

based in part on negotiated guidelines and NESC compliance. It has continued with its corrections. I reviewed the Declaration of EAI's David Inman. While he tried to make it seem that EAI had been accommodating, my strong view is that Entergy scuttled what could have been a reasonable and workable arrangement.

EAI Has Distorted The NESC And Its Application

46. EAI has grossly distorted the terms and even the purpose of the NESC. The Inman Declaration provides a strong example. At paragraph 35 of his Declaration, Mr. Inman states: "EAI has attempted to accommodate the Cable Operators in the past by permitting them to remedy past violations by bringing those facilities into conformance with the applicable NESC code." As with much of what EAI has submitted here, it is not just what was said and who said it, but what is not said. The truth, as indicated, is that Entergy was *not* going to allow the NESC to apply to all past violations, only the poles on which USS had discovered alleged violations. As to future installations, and as to all poles on which USS had not identified violations, this statement from Mr. Inman is silent. This means that the NESC was not going to apply, but EAI's unpredictable and unreasonable standards were.

47. For example, these standards are unpredictable because EAI reserves the right to change them at will. Every new NESC edition has code changes but also allows existing facilities in compliance with prior editions of

the code to be grandfathered. EAI refuses to respect this critical provision. I address this corruption of grandfathering in greater detail elsewhere.

48. This is not to say that there should not be situations where the utility's standards exceed the NESC basic provisions. This can be a perfectly reasonable approach to take.

49. For example, during the design and installation phases of pole and electric facilities there are a few basic things that must be done. First, EAI must provide adequate space on the pole for its facilities (and possible expansion) and for other attachers. Second, it must actually install its wires and equipment consistent with the plant design and the space allocations. Third, communication companies, including cable operators must comply with EAI standards and attach consistent with EAI's reasonable space allocation and requirements. A point that simply cannot be over-emphasized is that the NESC is the foundation that underlies such additional utility specific standards. The heated argument that Entergy makes in its legal papers that the NESC is the absolute minimum standard to be followed fundamentally misconstrues the NESC. A critical element to understanding this most basic point is to examine closely the Declaration of EAI's expert, Mr. Dagenhart. I know Mr. Dagenhart to be very knowledgeable about the NESC, and he and his firm have a very good reputation in the utility community. Note well that Mr. Dagenhart has not provided any support for EAI's extreme view that the NESC is an absolute minimum standard. In fact,

the NESC Handbook (which many -- including myself -- find very helpful in working on these issues) which is edited by Mr. Dagenhart's business associate Alan Clapp states:

> In essence, the rules of the NESC give the basic requirements of construction that are necessary for safety. If the responsible party wishes to exceed the requirements for any reason, he may do so for his own purpose *but need not do so for safety purposes.*" (my emphasis) The Handbook also states: The 1990 Edition of the NESC was specifically editorially revised to delete the use of the word 'minimum' because of the intentional or inadvertent misuse of the term by some to imply that the NESC values were some kind of minimum number that should be exceeded in practice; such is not the case.

50. While I believe that this passage speaks for itself, I want again to emphasize that Mr. Dagenhart does not render an opinion to support this central EAI contention. Again, it is not simply what is said and by whom, but what is ***not*** said—and by whom. I believe that this is particularly significant because, in addition to all Mr. Dagenhart's other credentials, he serves on the NESC Standards Subcommittee for Purpose, Scope, Application, Definitions and References. *See* NESC 2002 Ed. p. viii.

The Rules Exceptions Contained In The NESC Are Critical Components To The Rules Themselves

51. Another example of Entergy's misunderstanding of the NESC is contained in the Declaration of Lonnie Buie. Mr. Buie states: "What the complainants truly argue, in general and obscure terms, is that communications attachments may meet certain complex conditions to fall within exceptions to the basic NESC provisions." Buie Declaration Para. 28.

He argues in essence that the exceptions are not basic provisions of the NESC. He is wrong.

52. Rule 015.D. of the 2002 NESC (Intent) states: "Exceptions to a rule have the same force and effect required or allowed by the rule to which the exception applies." But Mr. Buie states: "NESC by its own terms is a minimum standard." But then Mr. Buie quotes Rule 010 of the NESC which contains the "***basic*** provisions...for safety..." Prior versions of the Code used the word "minimum" instead of "basic," as it now appears. The NESC Handbook, Fifth Edition, which I quoted above, but which bears repeating here) explains why. "The 1990 edition of the NESC was specifically editorially revised to delete the use of the word "minimum" because of the intentional or inadvertent misuse of the term by some to imply that the NESC values were some kind of minimum number that should be exceeded in practice: such is not the case." So Mr. Buie is wrong about the force and effect of exceptions in the NESC and indulges in precisely the kind of "misuse" of the Code that the 1990 Edition "specifically editorially revised" out of the text.

53. But Mr. Buie does not stop there. Yet another misapplication of the NESC is found at Paragraph 45 of Mr. Buie's Declaration where he states that grandfathering was first adopted in the 1977 NESC and that facilities installed before 1977 would not be eligible for grandfathering. Rule 202.B.2 of the 1977 NESC states: "Existing installations, including maintenance